Supreme Court, U.S.
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No.

IN THE

Supreme Court of the United States

HALLIBURTON ENERGY SERVICES, INC.,

Petitioner,

v.

BJ SERVICES COMPANY,

Respondent.

On Petition for Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

PETITION FOR WRIT OF CERTIORARI

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January 15, 2004

QUESTION PRESENTED

Did the Court of Appeals for the Federal Circuit err in ruling that a jury's determination on the question of indefiniteness, an issue of patent claim interpretation, should be given deference as a question of fact reviewable for substantial evidence, despite this Court's clear holding in *Markman v. Westview Instruments*, 517 U.S. 370, 372 (1996), that the interpretation of a patent claim is a matter of law reserved entirely to the court, a holding critical to the uniformity and predictability of interpretation of patents, fair notice to industry of the territory excluded by patents, and realization of the primary purpose for creating the Federal Circuit?

LIST OF PARTIES TO THE PROCEEDING PURSUANT TO RULE 14(1)(B) AND CORPORATE DISCLOSURE STATEMENT PURSUANT TO RULE 29(6)

The names of all parties in the court whose judgment is sought to be reviewed appear in the caption of this Petition for Writ of *Certiorari*.

Petitioner, Halliburton Energy Services, Inc., identifies parent corporations and publicly held companies that own 10 percent or more of petitioner's stock as:

Halliburton Company
DII Industries, L.L.C.

TABLE OF CONTENTS

Page

QUESTION PRESENTED i

LIST OF PARTIES TO THE PROCEEDING PURSUANT TO RULE 14(1)(B) AND CORPORATE DISCLOSURE STATEMENT PURSUANT TO RULE 29(6) ii

TABLE OF CONTENTS iii

TABLE OF AUTHORITIES v

OPINIONS BELOW 1

JURISDICTION 1

STATUTORY PROVISION INVOLVED 1

STATEMENT OF THE CASE 1

The District Court Litigation 3

The Federal Circuit Appeal 6

REASONS FOR GRANTING THE WRIT 7

I. The Federal Circuit's Decision Conflicts with This Court's Holding in *Markman v. Westview Instruments*, 517 U.S. 370 (1996) and Resurrects a Split Within the Federal Circuit on an Important Issue of Federal Patent Law 9

II. The Federal Circuit's Decision Resuscitates Inconsistency and Unpredictability in Patent Law and Will Disrupt Administration of the Patent System 13

III. The Federal Circuit's Decision Undermines the Patent System's Objectives of Promoting Uniform Interpretation of Patent Claims and Giving Notice of a Patent's Scope to Potential Competitors 16

A. The Federal Circuit's Decision Undermines the Role of the Courts in Providing Uniform Interpretation of Patent Claims 16

B. The Federal Circuit's Decision Undermines the Notice Function of the Patent Act's Definiteness Requirement 18

CONCLUSION 21

TABLE OF AUTHORITIES

CASES

A.K. Stamping Co. v. Instrument Spec., Inc.,
106 F. Supp. 2d 627 (D.N.J. 2000) 15

Advanced Cardiovascular Sys. v. Scimed Life Sys.,
96 F. Supp. 2d 1006 (N.D. Cal. 2000) 13

Atmel Corp. v. Info. Storage Devices, Inc.,
198 F.3d 1374 (Fed. Cir. 1999) 10

Baker Hughes, Inc. v. Davis-Lynch, Inc.,
No. 01-1377, 2002 U.S. App. LEXIS 4380 (Fed. Cir. March 15, 2002) 12

Bausch & Lomb,
64 F. Supp. 2d 233 (W.D.N.Y. 1999) 15

BJ Services Co. v. Halliburton Energy Services, Inc.,
338 F.3d 1368 (Fed. Cir. 2003) 1, 2, 3, 4, 5, 6

BJ Services Co. v. Halliburton Energy Services, Inc.,
No. 02-1496, 2003 U.S. App. LEXIS 22668 (Fed. Cir. Oct. 17, 2003) 7

Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.,
296 F.3d 1106 (Fed. Cir. 2002) 9, 10

Cardinal Chemical Co. v. Morton,
508 U.S. 83 (1993) 8

Cybor Corp. v. FAS Technologies, Inc.,
138 F.3d 1448 (Fed. Cir. 1998).....passim

E.I. DuPont De Nemours v. Millennium Chem.,
No. 97-237-SLR, 1999 U.S. Dist. LEXIS 12447
(D. Del. Aug. 2, 1999).....15

Exxon Research & Eng'g Co. v. United States,
265 F.3d 1371 (Fed. Cir. 2001).....passim

General Elec. Co. v. Wabash Appliance Corp.,
304 U.S. 364 (1938).....18

Honeywell Int'l, Inc. v. ITC,
341 F.3d 1332 (Fed. Cir. 2003).....passim

Markman v. Westview Instruments, Inc.,
517 U.S. 370 (1996).....passim

Markman v. Westview Instruments., Inc.,
52 F.3d 967 (Fed. Cir. 1995).....14

McClain v. Ortmayer,
141 U.S. 419 (1891).....18

Merrill v. Yeomans,
94 U.S. 568 (1876).....19

Novo Indus., L.P. v. Micro Molds Corp.,
No. 03-1230, 2003 U.S. App. LEXIS 24458 (Fed.
Cir. Dec. 5, 2003).....10

Personalized Media Communications v. Int'l Trade Comm'n,
161 F.3d 696 (Fed. Cir. 1998).....2, 9

S3 Inc. v. nVIDIA Corp.,
259 F.3d 1364 (Fed. Cir. 2001).....10, 11, 18

Solomon v. Kimberly-Clark Corp.,
216 F.3d 1372 (Fed. Cir. 2000).....16, 20

TC Mfg. Co. v. Polyguard Prods.,
No. 96-C-8392, 1999 U.S. Dist. LEXIS 14730
(N.D. Ill. Sept. 15, 1999).....15

Union Carbon Co. v. Binney & Smith Co.,
317 U.S. 228 (1942).....19

Union Pac. Res. Co. v. Chesapeake Energy Corp.,
236 F.3d 684 (Fed. Cir. 2001).....5

Warner-Jenkinson Co. v. Hilton Davis Chem. Co.,
520 U.S. 17 (1997).....8, 16

STATUTES

28 U.S.C. § 1254(1).....1

35 U.S.C. § 1254(1).....1

35 U.S.C. § 112.....1, 2, 4, 9, 10

OTHER AUTHORITIES

H. R. REP. NO. 97-312 (1981).....17

S. REP. NO. 97-275 (1981).....16, 17

Halliburton Energy Services, Inc., respectfully petitions for a writ of *certiorari* to review the judgment of the United States Court of Appeals for the Federal Circuit.

OPINIONS BELOW

The opinion of the Court of Appeals is reported at 338 F.3d 1368 (Fed. Cir. 2003), and is reproduced beginning at Appendix page 1a. The judgment of the district court is reproduced beginning at Appendix page 10a.

JURISDICTION

A petition for panel rehearing and for rehearing *en banc* by the Federal Circuit was denied on October 17, 2003. The jurisdiction of this court is invoked under 28 U.S.C. § 1254(1).

STATUTORY PROVISION INVOLVED

35 U.S.C. § 112, ¶ 2 provides in relevant part:

> "The specification shall conclude with one of more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

STATEMENT OF THE CASE

This case presents a fundamental question in patent law concerning the role of the courts in determining the scope of patent claims. In *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996), this Court held that construing the scope of a patent claim is an issue of law reserved for the court. A determination of whether the scope

of a patent claim is "indefinite" pursuant to 35 U.S.C. § 112, ¶ 2 is also a question of law, because that determination "is drawn from the court's performance of its duty as the construer of patent claims." *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1376 (Fed. Cir. 2001) (quoting *Personalized Media Communications v. Int'l Trade Comm'n*, 161 F.3d 696, 705 (Fed. Cir. 1998)). Reserving these issues of claim interpretation for the courts is of critical importance to the American patent system because of "the importance of uniformity in the treatment of a given patent." *Markman*, 517 U.S. at 390.

The Federal Circuit's holding below contradicts this settled law and creates conflict and uncertainty on this important question of patent law. The court held that indefiniteness is an "essentially factual" issue that "is amenable to resolution by the jury," and that a jury's definiteness determination should be upheld if it is "supported by substantial evidence." *BJ Services Co. v. Halliburton Energy Services, Inc.*, 338 F.3d 1368, 1372 (Fed. Cir. 2003) (App. 5a). This decision sets a precedent by which, contrary to *Markman*, courts may defer to juries on matters of patent claim interpretation. The decision threatens to derail the judicial administration of the patent system, as courts are left with contradicting precedent in the Federal Circuit concerning whether to treat indefiniteness as a matter of law for the court or to defer to juries on the issue. Indeed, almost immediately after the decision at issue, and while a petition for rehearing *en banc* was pending in this case, a different panel of the Federal Circuit issued an irreconcilable decision holding indefiniteness is a question of law reserved to the court. *Honeywell Int'l, Inc. v. ITC*, 341 F.3d 1332, 1339-40 (Fed. Cir. 2003). The decision below, and the resulting uncertainty, undermines the patent system's

primary objectives of providing notice to competitors of a patent's scope and uniform interpretation of patent claims, and thus will discourage innovation in this country. *See Markman*, 517 U.S. at 390-91.

Because indefiniteness is an important and frequently litigated issue of patent law that is subject to the exclusive review of the Federal Circuit, the Federal Circuit's decision will have far-reaching implications for the practical administration of patent law across the nation.

The District Court Litigation

BJ accused Halliburton Energy Services ("HES") of infringing claim 17 of U.S. Patent No. 6,017,855 (the "'855 patent"). The '855 patent relates generally to a method of fracturing subterranean formations to stimulate oil and gas wells. 338 F.3d at 1370 (App. 2a). The method involves injecting a viscous fluid into a wellbore at high pressures to induce a crack in the formation. *Id.* Claim 17, and every other claim of the '855 patent, requires that the specific polymer used in the viscous fluid have "a C* value of about 0.06 percent by weight." *Id.*

HES argued that it did not infringe the '855 patent and that the patent was invalid, because the term "C*" rendered the scope of the claim indefinite. (A patent claim is indefinite if it does not reasonably apprise a person skilled in the art of the bounds of the claim – that is, if the claim is not "sufficiently precise to permit a potential competitor to

determine whether or not he is infringing." *Exxon*, 265 F.3d at 1375 (internal quotations omitted).[1]

Nothing in the '855 patent's specification explains how to measure C*. BJ conceded at trial that a person of ordinary skill in the art, reading the '855 patent, would not have known how to measure C* without resort to scientific literature not found in the patent. (Fed. Cir. Appendix, at A548, cited pursuant to SUP. CT. R. 12.7) It was undisputed that the scientific literature disclosed multiple methods of measuring C*. Those methods included the "Robinson," or "experimental," method and at least seven variants of the "theoretical" method. 338 F.3d at 1372 (App. 5a); *see also*, *e.g.*, A7910-12; A7916-18; A9018-22. Under the theoretical method, the C* value of a polymer could vary by as much as five times depending on which of the many variants of that method one chose to use. (*Compare* A4444-48 *with* A4214) Thus, using the theoretical approach, those skilled in the art could calculate many different C* values for the same polymer, and vary widely in their interpretations of the scope of the patent's C* limitation.

The "experimental" method of determining C* results in the same variability, because the '855 patent fails to explain how key experimental variables used in the measurement of C* (including temperature, pH, water source, and the presence and concentration of various additives) should be controlled. Those variables can have a significant impact on the measured C* value of a polymer in solution. (A9033-36) The variables chosen and the

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[1] The definiteness requirement comes from 35 U.S.C. § 112, ¶ 2, which requires that a patent claim "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention."

experimental conditions used by experts in the field, including each of the parties' experts and the parties' independent polymer supplier (which also measured the C* of the HES polymer), varied widely. (*See* A548, A4205, A4296, A4412-13, A7512, A7634-35 and A8946-47) Like the theoretical method, the experimental method is highly subjective and can produce widely varying results, even when carried out by trained scientists.[2]

Accordingly, HES argued that the "C*" limitation in claim 17 fails to inform the public, and BJ's competitors, which polymers fall within the scope of the '855 patent. Because many methods of measuring C* existed at the time – each yielding a substantially different result and thus giving the C* limitation a substantially different meaning – HES argued that the scope of claim 17 is indefinite as a matter of law. *See Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 692 (Fed. Cir. 2001); *Honeywell Int'l*, 341 F.3d at 1339-40.

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[2] Although BJ urged on appeal that persons of ordinary skill in the art would "readily know" to use a single variation of the experimental method (338 F.3d at 1372; App. 5a), the evidence showed that the fastest, simplest, and least expensive method of determining C* was the theoretical method. The theoretical approach was the approach the inventors used (but did not disclose) during development of the claimed invention (A7921), and the approach BJ urged Rhodia (the inventor and supplier of the polymers used by BJ and Halliburton (A7834)) to use (A4317-19). In fact, the evidence at trial showed that because of the complexity of the experimental method, one of ordinary skill in the art would not have used it. BJ's inventor testified that even he lacked the training and "specialized expertise" to perform the experimental method. (A7902-03)

After a 12-day trial, the jury rendered an infringement verdict in BJ's favor and awarded damages of $98.1 million. The trial court denied HES's motion for judgment as a matter of law that it did not infringe and that the patent was invalid because the claim term "C*" is indefinite.

The Federal Circuit Appeal

HES appealed to the United States Court of Appeals for the Federal Circuit. The Federal Circuit affirmed, noting the applicability of *de novo* review but instead applying a "substantial evidence" standard of review: "We conclude that substantial evidence supports the jury's finding that the '855 patent was not invalid for indefiniteness." 338 F.3d at 1372-73 (App. 5a, 7a). The Federal Circuit held, without citing any case and contrary to its own precedent, that:

> Like enablement, definiteness, too, is amenable to resolution by the jury where the issues are factual in nature. Because the issues here are essentially factual, we review the jury's verdict to determine if the ultimate conclusion reached is supported by substantial evidence.

Id. at 1372 (App. 5a).[3] The Federal Circuit's decision transformed a legal determination for the court, reviewable

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[3] On appeal, the Federal Circuit did not specifically address Halliburton's primary indefiniteness argument, that the term "C*" renders the patent indefinite. (The court specifically considered the C* limitation only in the context of enablement, which Halliburton argued in the alternative.) Nevertheless, the Federal Circuit erroneously deferred to the jury's

de novo, into a factual question reviewable under the deferential "substantial evidence" standard. Had the court addressed the indefiniteness question under the *de novo* standard of review, it would have reversed the trial court's judgment.

HES petitioned for panel rehearing and for rehearing *en banc* by the Federal Circuit. Both requests were denied. *BJ Services Co. v. Halliburton Energy Services, Inc.*, No. 02-1496, 2003 U.S. App. LEXIS 22668, at *1 (Fed. Cir. Oct. 17, 2003) (App. 25-a).

REASONS FOR GRANTING THE WRIT

The Court should grant *certiorari* because the Federal Circuit's decision (1) conflicts with this Court's holding in *Markman* that the court, not the jury, should determine the scope of patent claims, (2) resurrects a split in the Federal Circuit's patent jurisprudence having far-reaching implications for the practical administration of the patent system, and (3) undermines the fundamental uniformity and notice objectives of American patent law.

Currently, three-judge panels in the Federal Circuit are labeling issues of law and fact in contradictory ways and are applying competing standards of review to issues of claim construction. This creates significant confusion within the Federal Circuit and in the trial courts concerning the proper role for juries in matters of claim construction. The resulting inconsistent and confused state of the law on this

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indefiniteness determination, just as it expressly did regarding another indefiniteness argument Halliburton made.

important issue of patent law will cause unpredictable results in nearly identical cases, non-uniform interpretation of patent claims, and real and harmful day-to-day consequences in the administration of the patent system.

The Federal Circuit's decision allows juries to determine the scope of a patent claim based solely on extrinsic evidence and credibility determinations that are not available to competitors when a patent issues. In addition, under the decision below, the same patent language will be subject to different interpretations by different juries in different infringement actions, even within the same jurisdiction. Thus, the Federal Circuit's decision undermines the courts' role in providing uniformity in the application of patent law and in the interpretation of patent claims. *See Markman*, 517 U.S. at 390; *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448, 1455 (Fed. Cir. 1998) (*en banc*).

Finally, because the Federal Circuit has exclusive jurisdiction over appeals from all United States District Courts in patent litigation, the conflict created by the Federal Circuit's decision "is a matter of special importance to the entire Nation" (*Cardinal Chemical Co. v. Morton*, 508 U.S. 83, 89 (1993)), and is particularly appropriate for Supreme Court review (*Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997)).

Although this Court's *Markman* decision held that issues of claim interpretation are matters of law for the court, it did not specifically address the applicable standard of review on appeal. This Court should grant *certiorari* to reaffirm that matters involving claim interpretation, including indefiniteness, are matters of law for the court and

to rule that they are reviewed *de novo*, not with deference to juries under a substantial evidence standard.

I. The Federal Circuit's Decision Conflicts with This Court's Holding in *Markman v. Westview Instruments*, 517 U.S. 370 (1996) and Resurrects a Split Within the Federal Circuit on an Important Issue Of Federal Patent Law.

The Federal Circuit's decision cannot be reconciled with either the Federal Circuit's own precedent or this Court's holding in *Markman*. In *Markman*, this Court held that issues of claim interpretation are "purely legal" issues that are "exclusively within the province of the court." 517 U.S. at 372, 391. In the wake of this Court's *Markman* decision, the Federal Circuit decided *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998) (*en banc*) and *Exxon v. United States*, 265 F.3d 1371 (Fed. Cir. 2001). Those cases established that issues of claim construction, and specifically indefiniteness, are issues of law that should be reviewed *de novo*.

In *Exxon*, the Federal Circuit held that whether a claim is invalid for indefiniteness pursuant to 35 U.S.C. § 112, ¶ 2, "presents a question of law." 265 F.3d at 1376. Because indefiniteness is a question of law, a definiteness determination is reviewed "without deference" to the findings in the trial court. *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002). As the Federal Circuit explained in *Exxon*, an indefiniteness determination "is drawn from the court's performance of its duty as the construer of patent claims." 265 F.3d at 1376 (quoting *Personalized Media Commun. v. Int'l Trade*

Comm'n, 161 F.3d 696, 705 (Fed. Cir. 1998)); *see also S3 Inc. v. nVIDIA Corp.*, 259 F.3d 1364, 1367 (Fed. Cir. 2001) ("whether the claims meet the [indefiniteness] statutory requirements of § 112 ¶2 is a matter of construction of the claims"). If the conclusion of a court's claim construction exercise is that the claim is too ambiguous to be construed, the claim is indefinite. *Exxon*, 265 F.3d at 1375; *Novo Indus., L.P. v. Micro Molds Corp.*, No. 03-1230, 2003 U.S. App. LEXIS 24458, at *12 (Fed. Cir. Dec. 5, 2003). Indefiniteness is thus "inextricably intertwined with claim construction," and "therefore, like claim construction, is a question of law that we review *de novo*." *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378-79 (Fed. Cir. 1999); *see also Exxon*, 265 F.3d at 1376.

Because an indefiniteness determination derives from the court's claim construction duties, the Federal Circuit's decision in *Exxon* was dictated by its *en banc* decision in *Cybor*. The Federal Circuit ordered *Cybor* to be decided *en banc* to resolve a conflict in the standards of review applied by different panels of the Federal Circuit when reviewing claim construction rulings. 138 F.3d at 1454-55. The Federal Circuit resolved the conflict between (1) panels that reviewed claim construction issues *de novo*, and (2) panels that applied "a clearly erroneous standard ... to findings considered to be factual in nature that are incident to the judge's construction of patent claims." *Id.* The Federal Circuit concluded that "the *de novo* standard of review as stated in [its *en banc* decision in] *Markman* remains good law." *Id.*[4]

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[4] *See also Honeywell*, 341 F.3d at 1338 (definiteness "is a legal conclusion that is reviewed *de novo*"); *Cardiac Pacemakers*, 296 F.3d at

The *Cybor* court rejected the notion – urged in a minority concurring opinion – "that there should be deference to what are asserted to be factual underpinnings of claim construction."[5] *Id.* at 1455. The court concluded that in *Markman*, this Court held "that the totality of claim construction is a legal question to be decided by the judge." *Id.* "Nothing in the Supreme Court's opinion supports the view that the Court endorsed a silent, third option – that claim construction may involve subsidiary or underlying questions of fact." *Id.* The Federal Circuit, therefore, expressly rejected the "view that ... while claim construction is a legal question for the judge, there may also be underlying fact questions." *Id.* In an attempt to bring uniformity to the Federal Circuit's review of decisions involving claim construction, the *en banc* court held "as a purely legal question, we review claim construction *de novo* on appeal including any allegedly fact-based questions relating to claim construction." *Id.* at 1456.

In *Exxon*, the Federal Circuit similarly rejected the "conten[tion] that indefiniteness depends on underlying questions of fact." 265 F.3d at 1376. The court stated that:

> *Cybor* ... reaffirmed that although a court may consider or reject certain extrinsic evidence in

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1113 (a definiteness determination is reviewed "without deference" to the findings in the trial court); *S3 Inc.*, 259 F.3d at 1367.

[5] Although the *Cybor* majority held that claim construction, as a purely legal issue, is subject to *de novo* review on appeal, 138 F.3d at 1451, disagreement existed on the Federal Circuit about how to interpret this Court's holding in *Markman*. Five judges wrote separate opinions – three concurring and two dissenting. *Id.* at 1462-1481.

> resolving disputes en route to pronouncing the meaning of claim language, "the court is not crediting certain evidence over other evidence or making factual evidentiary findings. Rather, the court is looking to the extrinsic evidence to assist in its construction of the written document . . . ."

Id. (quoting *Cybor*, 138 F.3d at 1454). The court "therefore reject[ed] Exxon's argument that the issue of indefiniteness turns on an underlying factual dispute."[6] *Id.*

Thus, in *Exxon* the Federal Circuit squarely rejected the same "factual" approach to reviewing a definiteness determination that the Federal Circuit applied in this case, because that approach conflicts with the Federal Circuit's *en banc* decision in *Cybor* and this Court's decision in *Markman*. To allow certain panels within the Federal Circuit to now disregard this Court's *Markman* decision and the Federal Circuit's precedential *Exxon* and *Cybor* decisions will only create a deeper divide within the Federal Circuit resulting in significant practical consequences in the administration of the patent system.

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[6] *See also Baker Hughes, Inc. v. Davis-Lynch, Inc.*, No. 01-1377, 2002 U.S. App. LEXIS 4380, *7 (Fed. Cir. March 15, 2002) ("We have specifically rejected the contention that [indefiniteness] involves underlying issues of fact.") (unpublished opinion).

II. The Federal Circuit's Decision Resuscitates Inconsistency and Unpredictability in Patent Law and Will Disrupt Administration of the Patent System.

The resulting conflict in the precedent governing trial courts' and the Federal Circuit's review of patent cases will derail administration of the patent system and lead to inconsistent and unpredictable application of patent law. Because the decision below has created inconsistent legal standards in the Federal Circuit, it will create confusion within the courts regarding the proper method of determining and reviewing indefiniteness, similar to the confusion that existed before the Federal Circuit's decisions in *Cybor* and *Exxon*. *See, e.g., Advanced Cardiovascular Sys. v. Scimed Life Sys.*, 96 F. Supp. 2d 1006, 1018 (N.D. Cal. 2000) ("It is not entirely clear from these [pre-*Exxon*] cases whether indefiniteness should be decided ... as a pure question of law, as in claim construction, or whether material factual disputes concerning indefiniteness are to be decided by the jury.")

The Federal Circuit has not been able to resolve this conflict on its own and continues to address the indefiniteness issue under inconsistent standards of review. Subsequent to the Federal Circuit's decision in this case, a different Federal Circuit panel addressed the same issue – whether the court should defer to a determination of indefiniteness in the trial court or review it *de novo* – with nearly identical facts, and came to the opposite conclusion. *Honeywell*, 341 F.3d at 1338, 1340-41 (holding that indefiniteness "is a legal conclusion that is reviewed *de novo*" and, "[a]fter reviewing the entire record regarding claim construction," concluding that the patent was

indefinite with respect to how to measure the patented polymer property). The Federal Circuit's decision in this case cannot be reconciled with either its earlier decision in *Exxon* or its subsequent decision in *Honeywell*.

Under this confused and unpredictable state of the law, some trial courts will send the allegedly "factual" issue of indefiniteness to the jury, and some will keep the indefiniteness determination for the court as a matter of law. And depending on which Federal Circuit panel reviews the trial court's judgment, the indefiniteness determination might be reviewed *de novo* or for substantial evidence. Thus, several inconsistent applications of the patent law are now equally probable in a given case:

> (1) the trial court sends indefiniteness to the jury and the Federal Circuit gives deference to the jury's determination under "substantial evidence" review (applying the standard of review set forth in the Federal Circuit's decision in this case);[7] or
>
> (2) the trial court sends indefiniteness to the jury and the Federal Circuit reviews the jury's determination *de novo* (as required by *Exxon*); or
>
> (3) the trial court decides indefiniteness as a matter of law and the Federal Circuit reviews the trial court's determination *de novo* (required by *Exxon*); or

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[7] Submitting such a question to the jury does not change the standard of review from *de novo* to "substantial evidence." *Markman v. Westview Instruments., Inc.*, 52 F.3d 967, 975 n.5 (Fed. Cir. 1995) (*en banc*).

> (4) the trial court decides indefiniteness as a matter of law and the Federal Circuit gives deference to the trial court's determination under "clearly erroneous" review (applying a factual standard of review in accordance with the Federal Circuit's decision in this case).

The courts are left to guess which of these approaches is appropriate under the current state of the Federal Circuit's precedent.[8] Similarly, patent litigants are left to guess whether the judge or jury will decide indefiniteness, whether it will be decided the same way twice, and whether the indefiniteness determination will be reviewed *de novo* or for "substantial evidence" or for "clear error."[9]

The confusion created by this significant disagreement within the Federal Circuit concerning the appropriate standard of review – which the Federal Circuit has been unable to resolve despite its decisions in *Cybor* and

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[8] This confused state of the law also wastes valuable judicial resources and delays resolution of matters that could be decided on summary judgment if trial courts – as they did prior to *Exxon* – deny summary judgment of indefiniteness because of alleged "factual" disputes. *See Bausch & Lomb*, 64 F. Supp. 2d 233, 245 (W.D.N.Y. 1999) ("underlying factual issues ... preclude the entry of summary judgment"); *A.K. Stamping Co. v. Instrument Spec., Inc.*, 106 F. Supp. 2d 627, 644 (D.N.J. 2000); *TC Mfg. Co. v. Polyguard Prods.*, No. 96-C-8392, 1999 U.S. Dist. LEXIS 14730, at *11 (N.D. Ill. Sept. 15, 1999); *E.I. DuPont De Nemours v. Millennium Chem.*, No. 97-237-SLR, 1999 U.S. Dist. LEXIS 12447, at *7-10 (D. Del. Aug. 2, 1999).

[9] As a result, the Federal Circuit will receive more appeals. Because of the uncertainty in the law, patent litigants receiving adverse rulings on indefiniteness might appeal when they otherwise would not, simply because the inconsistent state of the Federal Circuit law gives them a chance of reversal depending on which three-judge panel hears the case.

Exxon – requires clarification by the Supreme Court. *See Warner-Jenkinson*, 520 U.S. at 21. This lack of consistency in the application of patent law is exactly what Congress intended to prevent in creating the Federal Circuit as a court of exclusive jurisdiction. Prior to the creation of the Federal Circuit, regional courts of appeal were creating a body of patent law that was inconsistent and unpredictable. *See* S. REP. NO. 97-275, at 3-7 (1981). The decision below resuscitates the inconsistent and unpredictable state of the patent law about which Congress was concerned.

III. The Federal Circuit's Decision Undermines the Patent System's Objectives of Promoting Uniform Interpretation of Patent Claims and Giving Notice of a Patent's Scope to Potential Competitors.

In addition to the uncertainty the Federal Circuit's decision causes, the Federal Circuit's treatment of indefiniteness as a factual issue subject to "substantial evidence" review undermines the patent system's fundamental objective of promoting uniformity in determining a patent's scope and the Patent Act's notice function. *See Markman*, 517 U.S. at 390-91; *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379 (Fed. Cir. 2000).

A. The Federal Circuit's Decision Undermines the Role of the Courts in Providing Uniform Interpretation of Patent Claims.

In *Markman*, this Court concluded that "the importance of uniformity in the treatment of a given patent [i]s an independent reason to allocate all issues of [claim] construction to the court." *Markman*, 517 U.S. at 390; *see*

also S. REP. NO. 97-275, at 4 (Congress specifically identified patent law as an area with a "special need for nationwide uniformity.") This Court recognized that Congress sought uniformity to "strengthen the United States patent system in such a way as to foster technological growth and industrial innovation." *Markman*, 517 U.S. at 390 (quoting H. R. REP. NO. 97-312, at 20 (1981)). Indeed, "[i]t was just for the sake of such desirable uniformity that Congress created the Court of Appeals for the Federal Circuit as an exclusive appellate court for patent cases." *Id.* This Court also concluded that treating claim interpretation issues as purely legal "will promote ... intrajurisdictional certainty through the application of stare decisis" and "interjurisdictional uniformity under the authority of the single appeals court." *Id.* at 391.

The deferential "substantial evidence" standard of review that the Federal Circuit established below is inconsistent with each of the objectives emphasized in *Markman*, and squarely undermines the role of the courts in providing uniform construction of patent claims. *See id.* at 390-91; *Cybor*, 138 F.3d at 1455. Under the Federal Circuit's decision, the same patent can be interpreted differently in separate cases, even within the same jurisdiction, based on deference to alleged "factual" findings in the trial court. Any time a patent claim has multiple and irreconcilable possible interpretations, a jury's determination that the claim is nevertheless definite will not be reversed as long as there is "substantial evidence" to support any one of the possible meanings.

The Federal Circuit's approach undermines the "court's role in providing national uniformity to the construction of a patent claim, a role that would be impeded

if we were bound to give deference to ... factual determinations incident to claim construction." *Cybor*, 138 F.3d at 1455. In *Markman*, the Court warned that "[u]niformity would ... be ill served by submitting issues of [claim] construction to juries." 517 U.S. at 391. By deferring to juries' "factual" determinations concerning indefiniteness, the standard of review the Federal Circuit set forth below promotes exactly what *Markman* and *Cybor* cautioned against.

B. The Federal Circuit's Decision Undermines the Notice Function of the Patent Act's Definiteness Requirement.

The Federal Circuit's decision also undermines the notice function of the Patent Act's definiteness requirement. The Patent Act's definiteness requirement "focuses on whether the claims, as interpreted ... adequately perform their function of notifying the public of the [scope of the] patentee's right to exclude." *Honeywell*, 341 F.3d at 1338 (quoting *S3 Inc.*, 259 F.3d at 1371-72). "It has long been understood that a patent must describe the exact scope of an invention and its manufacture to 'secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them.'" *Markman*, 517 U.S. at 373 (quoting *McClain v. Ortmayer*, 141 U.S. 419 (1891)). Otherwise, "[c]ompetitors trying to practice the invention or to design around it [will] be unable to discern the bounds of the invention." *Honeywell*, 341 F.3d at 1341.

This notice function is critical to the American patent system's goal of "encourag[ing] the inventive genius of others." *Markman*, 517 U.S. at 390 (quoting *General Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 369 (1938)).

Over 125 years ago, this Court recognized the importance to innovation of providing notice to competitors about the scope of patent claims:

> The genius of the inventor, constantly making improvements in existing patents, – a process which gives to the patent system its greatest value, – should not be restrained by vague and indefinite descriptions of claims in existing patents from the salutary and necessary right of improving on that which has already been invented.

Merrill v. Yeomans, 94 U.S. 568, 573 (1876).

Instead of providing consistent notice of the bounds of a patent's protection, the Federal Circuit's deferential standard of review creates "a zone of uncertainty" concerning each patent's scope, which competitors may enter only at the risk of being found to infringe.[10] *Union Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942). Rather than promoting the Patent Act's notice function, therefore, the uncertainty resulting from the standard established below will "discourage invention only a little less than unequivocal foreclosure of the field." *Id.*; *see also Markman*, 517 U.S. at 390.

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[10] A deferential standard is detrimental to both accused infringers and patentees. *See, e.g.*, *Markman*, 52 F.3d at 979 ("To treat the nature of the patented invention as a matter of fact, to be inquired of and determined by a jury, would at once deprive the inventor of the opportunity to obtain a permanent and universal definition of his rights under the patent, and in each case of infringement it would subject him to the danger of false interpretation, from the consequences of which he could not escape.") (citation omitted).

Under the Federal Circuit's deferential approach in this case, competitors will not have adequate notice of the scope of a patent because any two juries may give the same patent a different scope.[11] Moreover, the standard set forth below allows juries to determine claim definiteness based solely on extrinsic evidence and credibility determinations that are not available to competitors when a patent issues. The decision allows jurors to pick and choose from various conflicting interpretations to avoid indefiniteness. This is something a judge – determining indefiniteness as a matter of law – may not do. *See Honeywell*, 341 F.3d at 1341 ("we may not rewrite claims to preserve validity" by using extrinsic evidence not available to the public).[12] These consequences of the Federal Circuit's decision undercut the primary purpose of the definiteness requirement – ensuring that patent claims "adequately perform their function of notifying the public of the patentee's right to exclude." *Solomon*, 216 F.3d 1372 at 1379. The Federal Circuit's "substantial evidence" standard of review, and its deference to extrinsic evidence to cure a patent's indefiniteness, thus vitiates the Patent Act's notice function. *See Solomon*, 216 F.3d at 1379.

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[11] The exception would be where issue preclusion applies. *See Markman*, 517 U.S. at 391.

[12] *See also Markman*, 52 F.3d at 979 ("competitors should be able to rest assured, if infringement litigation occurs, that a judge, trained in the law, will … analyze the text of the patent and its associated public record and apply the established rules of construction, and in that way arrive at the true and consistent scope of the patent owner's rights to be given legal effect").

CONCLUSION

For the foregoing reasons, the Petition for a Writ of *Certiorari* should be granted.

January 15, 2004

Respectfully submitted,

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APPENDIX

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

02-1496

BJ SERVICES COMPANY,

Plaintiff-Appellee,

v.

HALLIBURTON ENERGY SERVICES, INC.,

Defendant-Appellant.

DECIDED: August 6, 2003

Before MAYER, Chief Judge, DYK and PROST, Circuit Judges.

MAYER, Chief Judge.

Halliburton Energy Services, Inc. appeals the final judgment of the United States District Court for the Southern District of Texas that United States Patent No. 6,017,855 ("'855 patent") is not invalid and infringed. BJ Serv. Co. v. Halliburton Energy Serv., Inc., 00-CV-948 (S.D. Tex. Apr. 23, 2002). Because the district court did not err on the law and the jury's verdict is supported by substantial evidence, we affirm.

Background

BJ Services owns the '855 patent directed to a method of fracturing subterranean formations to stimulate oil and gas wells. It achieves this by injecting a viscous fluid into a wellbore at a pressure sufficient to induce a crack in the formation. Claim 17, the sole claim at issue depends from claim 5. Those claims read:

> 5. A method of fracturing a subterranean formation, comprising the steps of:
>
> blending together an aqueous fluid and a hydratable polymer to form a base fluid, wherein the hydratable polymer is a guar polymer having carboxymethyl substituents and a C* value of about 0.06 percent by weight;
>
> adding a crosslinking agent to the base fluid to form a gel; and
>
> injecting the gel into at least a portion of the subterranean formation at high pressure to form fractures within the formation.
>
> 17. A method according to claim 5, wherein the hydratable polymer comprises CMG.

'855 patent, col. 8, ll. 28-40, and col. 9, ll. 15-16. The C* concentration, central to this case, is described by the patent as "that concentration necessary to cause polymer chain overlap. Suitable polymer chain overlap to effectively obtain a crosslinked gel is thought to occur when polymer concentration exceeds the C* concentration." Id. at col. 2, ll. 57-61. CMG stands for carboxymethyl guar. Id. at col. 1, l. 48. The patent says that it had been previously thought by

those of skill in the art that to successfully achieve a fracturing polymer gel, C* values of 0.19 to 0.22 weight percent were necessary.

BJ Services brought suit against Halliburton alleging that its Phoenix system infringed claim 17 of the '855 patent. Halliburton argued that the patent was invalid because claim 17 is indefinite, the patent does not contain a written description of the invention, the specification is not enabling to one of skill in the art, claim 17 is anticipated, and the patent does not name the proper inventors. The jury rejected these arguments, found Halliburton to have infringed claim 17, and awarded damages in the amount of $98.1 million. After the district court denied its motions for judgment as a matter of law and for a new trial, Halliburton appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a).

Discussion

"We review a trial court's decision on a motion for judgment as a matter of law following a jury verdict by reapplying its own standard of review. Therefore, for [Halliburton] to prevail on appeal it must prove that the jury's factual findings were not supported by substantial evidence or that the facts were not sufficient to support the conclusions necessarily drawn by the jury on the way to its verdict." Tec Air, Inc. v. Denso Mfg. Mich., Inc., 192 F.3d 1353, 1357 (Fed. Cir. 1999) (citations omitted). In evaluating whether Halliburton met this standard, "we must consider the evidence of record in the light most favorable to [BJ Services], drawing all reasonable inferences in its favor, without disturbing the jury's credibility determinations or substituting our resolutions of conflicting evidence for those of the jury." Id., at 1357-58. If no reasonable person could have reached a verdict for BJ Services in light of the record before the jury, Halliburton will prevail. Id. at 1358.

On appeal, Halliburton argues that the '855 patent is invalid for failing to meet the requirements of the first and second paragraphs of 35 U.S.C. § 112: the specification does not "enable any person skilled in the art to which it pertains . . . to make and use the [invention]," 35 U.S.C. § 112, ¶ 1; and the claims do not "particularly [point] out and distinctly [claim] the subject matter which the applicant regards as his invention." Id. § 112, ¶ 2. See Personalized Media Communications v. Int'l Trade Comm'n, 161 F.3d 696, 705 (Fed. Cir. 1998). Halliburton argues that because the patent does not disclose the method for determining the C* value, it is invalid for lack of enablement. And, blurring the line between enablement and indefiniteness, it further argues that because "about 0.06" is indefinite, the patent would not enable one of skill in the art to make and use the invention.

"Enablement is a legal determination of whether a patent enables one skilled in the art to make and use the claimed invention." (citations omitted) Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384 (Fed. Cir. 1986). Even if some experimentation is required, so long as it is not unduly extensive, a specification can still be enabling. Atlas Powder Co. v. E. I. Du Pont De Nemours & Co., 750 F.2d 1569, 1576 (Fed. Cir. 1984). Although enablement is a question of law, because of the factual nature of the inquiry in this case, it is amenable to resolution by the jury. Spectra-Physics, Inc. v. Coherent, Inc., 827 F.2d 1524, 1533 (Fed. Cir. 1987). And because a jury decided the issue here based on factual determinations, we look to whether a reasonable jury could have made the underlying factual findings necessary to provide substantial evidence in support of its conclusion. Allen Organ Co. v. Kimball Int'l, Inc., 839 F.2d 1556, 1566 (Fed. Cir. 1988).

Indefiniteness is also a legal determination arising out of the court's performance of its duty construing the claims, Personalized Media Communications, 161 F.3d at 705, and is reviewed de novo. Cardiac Pacemakers, Inc. v. St. Jude. Med., Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002). "The definiteness inquiry focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the rest of the specification." Union Pac. Res. Co. v. Chesapeake Energy Corp., 236 F.3d 684, 692 (Fed. Cir. 2001) citing Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576 (Fed. Cir. 1983). Like enablement, definiteness, too, is amenable to resolution by the jury where the issues are factual in nature. Because the issues here are essentially factual, we review the jury's verdict to determine if the ultimate conclusion reached is supported by substantial evidence.

Halliburton argues that because the '855 patent does not instruct someone of skill in the art what method and under what conditions to measure C*, it is not enabling. Evidence was presented at trial that C* can be calculated either theoretically or experimentally. The parties acknowledge that the experimental method is the more precise of the two, but they differ over what experimental conditions should be employed. The patent is silent about the conditions, but BJ Services argues that it would have been readily known to one of ordinary skill in the art to measure C* of the polymer in the presence of deionized water and a clay stabilizer. To that end, it presented the testimony of the inventors, its rheology expert, as well as excerpts from a textbook that all confirmed that one of skill in the art would have known to measure the polymer in a solution of deionized water and a clay stabilizer. Halliburton merely showed that the value of C* could vary depending upon the chosen conditions; it did not call its expert who was

supposed to testify about the measurement conditions one of skill in the art would employ.

Halliburton further argued that because "about 0.06" was not defined by the '855 patent, one of ordinary skill in the art could not make and use the invention. As discussed above, one of skill in the art would have known how to measure C*; the question is whether one of skill in the art, having done the experiments to calculate C*, would have known if the result that he reached was "about 0.06." This is a question of definiteness, not enablement.

"Definiteness problems often arise when words of degree are used in a claim. That some claim language may not be precise, however, does not automatically render a claim invalid." Seattle Box Co., Inc. v. Indus. Crating & Packing, Inc., 731 F.2d 818, 826 (Fed. Cir. 1984). The question becomes whether one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification. Id. BJ Services argues that the term "about" is intended to encompass the range of experimental error that occurs in any measurement and that one of skill in the art would readily understand the range that "about 0.06" was intended to include. To that end, it presented the experimental results obtained by its expert, all of which were slightly above or below 0.06 for an average of 0.0596. In an effort to contradict this testimony, Halliburton presented the results of its expert which varied wildly and conveniently ranged as high as the prior art. However, BJ Services presented evidence that Halliburton's expert had tampered with his rheometric equipment by substituting his software for that of the machine, improperly mixed the test solutions, and had specifically chosen imbalanced data points necessary to measure C*. Moreover, BJ Services offered evidence that if the raw data were analyzed without the tampering, the results would be very similar to those of

its expert. All of this likely impacted the credibility of Halliburton's expert. We conclude that substantial evidence supports the jury's finding that the '855 patent was not invalid for indefiniteness or lack of enablement.

Halliburton also argues that the '855 patent is inherently anticipated by United States Patent No. 5,697,444 to Moorhouse ("Moorhouse"), which discloses a fracturing fluid comprising one or more polymers, preferably carboxymethyl guar. Moorhouse, col. 2, ll. 45-47, and ll. 56-57. While the Moorhouse reference itself does not disclose the C* value, it was measured as 0.077. Thus, Halliburton argues that "about 0.06" includes 0.077 and this renders the patent invalid.

"What a prior art reference discloses in an anticipation analysis is a factual determination that we review for substantial evidence when decided by a jury." Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1323 (Fed. Cir. 2002). In the district court, Halliburton did not request that the court construe "about 0.06," it agreed that the jury should be instructed to give "about 0.06" its plain and ordinary meaning. Given that the term "about" was used to encompass experimental error and that the jury had before it the typical experimental range, substantial evidence supports the jury's finding that Moorhouse does not anticipate the '855 patent.

Additionally, Halliburton argues that the '855 patent is invalid for failing to name the proper inventors. It argues that William Stivers, a Rhodia employee who allegedly invented the CMG polymer, should have been listed as an inventor. Inventorship is a question of law with factual underpinnings, which are reviewed for substantial evidence. Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997). "There is a presumption that the

inventors named on an issued patent are correct, so misjoinder of inventors must be proven by clear and convincing evidence." Fina Oil & Chem. Co. v. Ewen, 123 F.3d 1466, 1472 (Fed. Cir. 1997); see also Hess, 106 F.3d at 980 (stating that "[t]he burden of showing misjoinder or nonjoinder of inventors is a heavy one" (quoting Garrett Corp. v. United States, 422 F.2d 874, 880 (Cl. Ct. 1970))); Price v. Symsek, 988 F.2d 1187, 1191 (Fed. Cir. 1993). Uncorroborated testimony alone cannot constitute clear and convincing proof. Price, 988 F.2d at 1194. What is required is "corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention." Burroughs Wellcome Co. v. Barr Labs. Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994). Conception is the touchstone of inventorship, and each joint inventor must contribute in some significant manner to the conception of the invention. Id. at 1227-28. Conception is the formation in the mind of the inventor a definite and permanent idea of the complete and operative invention as it is applied in practice. Sewall v. Walters, 21 F.3d 411, 415 (Fed. Cir. 1994).

The claim here is drawn to a method of fracturing a subterranean formation. As a part of that method, a polymer with a certain C* value is used. The claim is not to the polymer itself but rather to a method that incorporates that polymer. BJ Services presented evidence at trial that Stivers had no knowledge of the method, how the polymer would be used, or the C* value. Substantial evidence therefore supports the jury's finding that the '855 patent is not invalid for failing to properly name the true inventors.

Last, Halliburton argues for a new trial based upon a demonstration conducted by BJ Services near the close of trial. We review the trial court's denial of a motion for a new trial for abuse of discretion. Stryker Corp. v Davol Inc., 234

F.3d 1252, 1259 (Fed. Cir. 2000). "That question turns on whether an error occurred in the conduct of the trial that was so grievous as to have rendered the trial unfair." Id. For the reasons set out above, the jury verdict was not against the great weight of the evidence, and the denial of a new trial was not an abuse of discretion.

Conclusion

Accordingly, the judgment of the United States District Court for the Southern District of Texas is affirmed.

AFFIRMED

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

B.J. SERVICES COMPANY,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO.
	§	H-00-0948
	§	
HALLIBURTON ENERGY SERVICES, INC.,	§	
	§	
	§	
Defendant.	§	

FINAL JUDGMENT

In accordance with the jury's Verdict and the court's conclusion of law that B.J. Services Company was not guilty of inequitable conduct, the court ORDERS, ADJUDGES, and DECREES that plaintiff, B.J. Services Company, recover from defendant, Halliburton Energy Services, Inc.:

(1) $98,100,000.00 as damages adequate to compensate B.J. Services Company for Halliburton Energy Services, Inc.'s infringement;

(2) $3,000,000.00 in prejudgment interest;

(3) post-judgment interest at the rate of 2.53% per annum on the above amounts; and

(4) plaintiff's taxable costs.

It is further ORDERED, ADJUDGED, and DECREED that Halliburton Energy Services, Inc. take nothing on its counterclaims, which are DISMISSED in their entirety with prejudice, and that Halliburton Energy Services, Inc. is ENJOINED from infringing the '855 patent.

With the exception of a Permanent Injunction, which will be entered later as a separate instrument, all relief not expressly granted is DENIED.

This is a FINAL JUDGMENT.

SIGNED at Houston, Texas, this 22nd day of April, 2002.

s/Sim Lake
SIM LAKE
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

B.J. SERVICES COMPANY,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO.
	§	H-00-0948
	§	
HALLIBURTON ENERGY SERVICES, INC.,	§	
	§	
Defendant.	§	

ORDER

Halliburton Energy Services, Inc.'s Motion for Judgment as a Matter of Law or, in the Alternative, for a New Trial or to Alter or Amend the Court's Judgment with Respect to Damages (Docket Entry No. 263) and Halliburton's Motion for Judgment as a Matter of Law or, in the Alternative, for a New Trial (Docket Entry No. 265) are **DENIED**.

SIGNED at Houston, Texas, on this the 12th day of June, 2002.

s/Sim Lake
SIM LAKE
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

B.J. SERVICES COMPANY,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO.
	§	H-00-0948
	§	
HALLIBURTON ENERGY SERVICES, INC.,	§	
	§	
Defendant.	§	

PERMANENT INJUNCTION

After the three-week trial of this case, the jury found and the Court concluded that (a) United States Patent No. 6,017,855 (the "'855 patent"), of which B.J. Services Company is the assignee, is valid and enforceable; and (b) Halliburton Energy Services, Inc. infringed claim 17 of the '855 patent. Based on the evidence of Halliburton's infringing activities through April 11, 2002, the jury returned a verdict that B.J. Services Company was entitled to damages in the amount of $98,100,000.00. On the basis of the full record at trial, the jury verdict, and the applicable law, the Court finds and holds that Halliburton Energy Services, Inc. failed to prove that the patent is invalid or unenforceable, and that B.J. Services Company proved that Halliburton Energy Services, Inc. infringed claim 17. The Court also finds and holds that the provisions of this Permanent Injunction are appropriate and necessary to protect B.J. Services Company's rights under the '855

patent. Accordingly, the Court grants B.J. Services Company's application for an Order of Permanent Injunction.

IT IS HEREBY ORDERED THAT:

1. As of the effective date of this Permanent Injunction, April 19, 2002, Halliburton Energy Services, Inc. and its subsidiaries, divisions and affiliates, and their directors, officers, agents, servants, representatives, employees, successors and assigns, and all persons in active concert or participation with any of them, are enjoined:

(a) from making, using, offering to sell, or selling its PHOENIX system or any other method(s) no more than colorably different from the PHOENIX system in the United States;

(b) from making, using, offering to sell, or selling any method that infringes claim 17 of United States Patent No. 6,017,855;

(c) from making, using, offering to sell, or selling a method for fracturing subterranean formations that would induce infringement or contributorily infringe claim 17 of United States Patent No. 6,017,855;

(d) from otherwise directly infringing, contributorily infringing, or inducing infringement of claim 17 of United States Patent No. 6,017,855; and

2. This Court retains jurisdiction to interpret and enforce the provisions of this Permanent Injunction, including any future questions of its violation or of infringement by Halliburton Energy Services, Inc. of United States Patent No. 6,017,855.

s/Sim Lake
SIM LAKE
UNITED STATES DISTRICT JUDGE

Issued on May 17, 2002 at 4:45 o'clock p.m.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

B.J. SERVICES COMPANY,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO.
	§	H-00-0948
	§	
HALLIBURTON ENERGY SERVICES, INC.,	§	
	§	
Defendant.	§	

CONCLUSIONS OF LAW

On March 1, 2001, the court conducted a Markman hearing in accordance with Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1996) (en banc), aff'd, 517 U.S. 370 (1996). After carefully considering the arguments of counsel, the briefs, and stipulations submitted, patent number 6,017,855 ("the '855 patent"), and the prosecution history of the patent, the court makes the following conclusions with respect to terms that are disputed by the parties in this case.

1. "C*" is the concentration of polymer necessary to cause polymer chain overlap.

2. "To form a gel" means that a gel occurs when a crosslinking agent, such as a zirconium-based crosslinking agent, reacts with a base fluid, transforming the essentially

linear structure of the polymer solution into a three-dimensional gel.

3. "Adding a zirconium-based crosslinking agent to the base fluid to form a crosslinked gel" means that the crosslinked gel occurs after a zirconium-based crosslinking agent reacts with the base fluid, transforming the essentially linear structure of a polymer solution into a three-dimensional gel.

4. It is not necessary to define the term "about 0.06% by weight." This term is to be construed in accordance with its plain and ordinary meaning, and no definition is necessary.

SIGNED at Houston, Texas, on this the 1st day of March, 2001.

s/Sim Lake

SIM LAKE
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

B.J. SERVICES COMPANY, Plaintiff,	§	
v.	§	CIVIL ACTION NO. H-00-0948
HALLIBURTON ENERGY SERVICES, INC., Defendant.	§	

JURY VERDICT

We, the jury, unanimously find as follows:

QUESTION NO. 1

Do you find that B.J. Services has proven by a preponderance of the evidence that Halliburton's Phoenix System infringes claim 17 of the '855 patent?

Answer yes or no.

Yes (infringes) X No (does not infringe) _____

QUESTION NO. 2

If you answered "yes" to Question No. 1, then answer this question. If you did not, then do not answer this question.

Do you find that B.J. Services has proven by clear and convincing evidence that Halliburton willfully infringed claim 17 of the '855 patent?

Answer yes or no.

Yes _____ No __X____
(willfully infringed) (not willful)

QUESTION NO. 3

Do you find that Halliburton has proven by clear and convincing evidence that claim 17 of the '855 patent is invalid because it is indefinite?

Answer yes or no.

Yes (invalid) ____ No (invalidity not proven) __X__

QUESTION NO. 4

Do you find that Halliburton has proven by clear and convincing evidence that claim 17 of the patent is invalid because the '855 patent docs not contain a written description of the invention covered by claim 17?

Answer yes or no.

Yes (invalid) ____ No (invalidity not proven) _X_

QUESTION NO. 5

Do you find that Halliburton has proven by clear and convincing evidence that the '855 patent is invalid because the specification of the '855 patent is not enabling to one skilled in the art?

Answer yes or no.

Yes (invalid) ____ No (invalidity not proven) _X_

QUESTION NO. 6

Do you find that Halliburton has proven by clear and convincing evidence that the invention described in claim 17 of the '855 patent is invalid because it was anticipated?

Answer yes or no.

Yes (invalid) ____ No (invalidity not proven) _X_

QUESTION NO. 7

Do you find that Halliburton has proven by clear and convincing evidence that the '855 patent is invalid because the named inventors on the '855 patent are not the true inventors?

Answer yes or no.

Yes _____ (true inventors not named)

No __X__ (true inventors named)

QUESTION NO. 8

Do you find that Halliburton has proven by clear and convincing evidence that claim 17 of the '855 patent is invalid because it was derived from another?

Answer yes or no.

Yes (invalid) ____ No (invalidity not proven) __X__

QUESTION NO. 9

Do you find that Halliburton has proven by clear and convincing evidence that claim 17 of the '855 patent is invalid because it was obvious?

Answer yes or no.

Yes (invalid) _____ No (invalidity not proven) __X__

QUESTION NO. 10

Do you find that Halliburton has proven by clear and convincing evidence that the '855 patent is invalid because the inventors of the '855 patent failed to disclose what they considered to be the best mode for carrying out the claimed invention when the application for the '855 patent was filed?

Answer yes or no.

Yes (invalid) ____ No (invalidity not proven) __X__

QUESTION NO. 11

Has Halliburton proven by clear and convincing evidence that the '855 patent is unenforceable because the applicants for the '855 patent committed inequitable conduct before the Patent and Trademark Office?

Answer yes or no.

Yes _____ (inequitable conduct proven)

No __X____ (inequitable conduct not proven)

QUESTION NO. 12

If you have answered "Yes" to Question No. 1, then answer the following questions:

What amount of damages do you find that B.J. Services has proven by a preponderance of the evidence is necessary to fully and adequately compensate it for Halliburton's infringement?

A. If you find that B.J. Services is entitled to lost profits in the Codell, answer subparts 1 and 2, below:

1. Lost Profits (Codell)

$ 21.3M

2. Lost Discount (Codell)

$ 9.2M

B. If you find that B.J. Services is entitled to lost profits in the Vicksburg, Wilcox, and Lobo formations in South Texas, answer the following:

1. Lost Profits (Vicksburg, Wilcox, and Lobo/South Texas)

$ 54M

C. What amount of damages do you find that B.J. Services is entitled to as a reasonable royalty on all Phoenix sales for which you have not awarded lost profits?

$ 13.6M

Each juror should sign the verdict form to reflect that a unanimous verdict has been reached.

Dated: April __, 2002

_____
FOREPERSON

_____

_____

_____

_____

_____

_____

_____

_____

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

02-1496

BJ SERVICES COMPANY,

Plaintiff-Appellee,

v.

HALLIBURTON ENERGY SERVICES, INC.,

Defendant-Appellant.

ORDER

A combined petition for panel rehearing and for rehearing en banc having been filed by the APPELLANT, and a response thereto having been invited by the court and filed by the APPELLEE, and the petition for rehearing having been referred to the panel that heard the appeal, and thereafter the petition for rehearing en banc and response having been referred to the circuit judges who are in regular active service,

UPON CONSIDERATION THEREOF, it is

ORDERED that the petition for panel rehearing be, and the same hereby is, DENIED and it is further

ORDERED that the petition for rehearing en banc be, and the same hereby is, DENIED.

The mandate of the court will issue on October 24, 2003.

FOR THE COURT,

Jan Horbaly
Clerk

Dated: October 17, 2003

cc: Donald R. Dunner
William C. Slusser

BJ SERVICES V HALLIBURTON ENERGY, 02-1496

(DCT - 00-CV-0948)

Note: Pursuant to Fed. Cir. R. 47.6, this order is not citable as precedent. It is a public record.

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

02-1496

BJ SERVICES COMPANY,

Plaintiff-Appellee,

v.

HALLIBURTON ENERGY SERVICES, INC.,

Defendant-Appellant.

JUDGMENT

ON APPEAL from the UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS

In CASE NO(S) 00-CV-948

This CAUSE having been heard and considered, it is

ORDER and ADJUDGED:

AFFIRMED

ENTERED BY ORDER OF THE COURT

DATED August 6, 2003

s/Jan Horbaly
Jan Horbaly, Clerk

ISSUED AS A MANDATE: OCTOBER 24, 2003

Costs Against Appellant:	
Printing	$564.80
Total	$564.80